



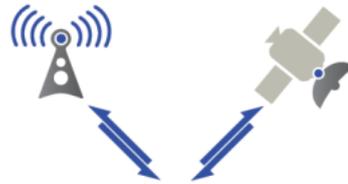
 **TEREX** | FINLAY

Terex Finlay T-Link

Fleet Management System

What is T-Link?

T-Link is a remote monitoring, fleet management system allowing crushing and screening equipment operators and owners to have access to key machine data via the Web. Analysing this data can improve machine operation, increase uptime and allow in-depth reporting and fleet management.



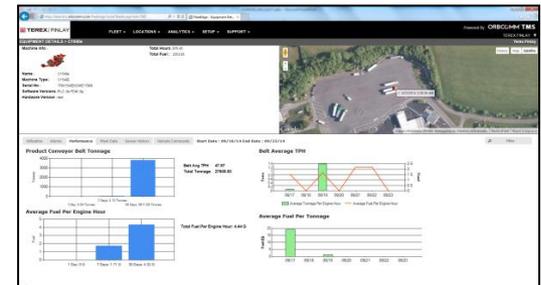
GSM/Satellite



Modem



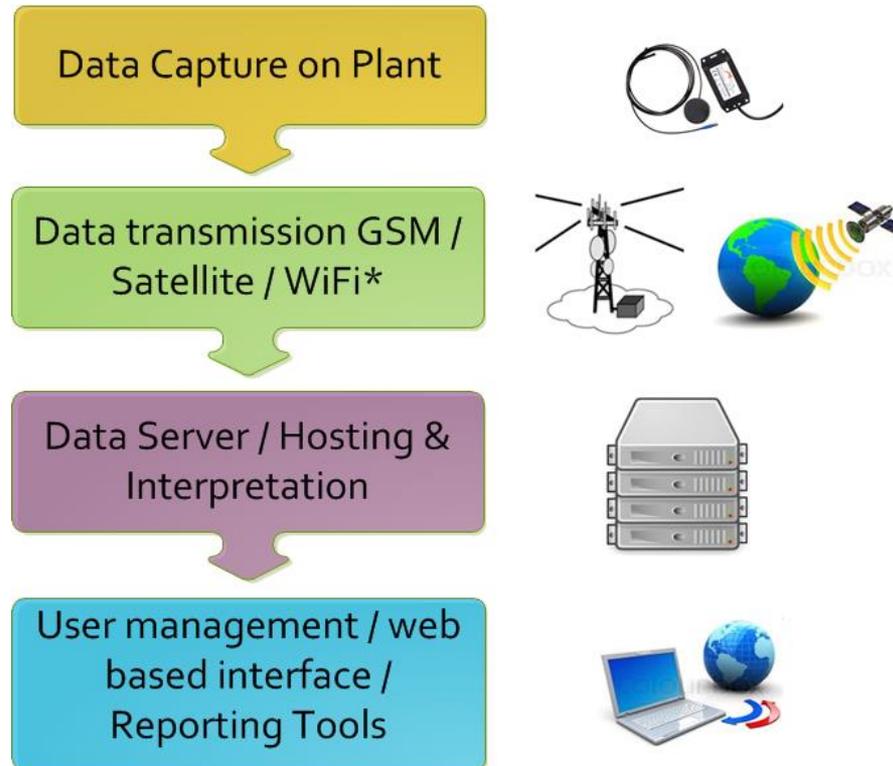
Machine/Asset



User Interface

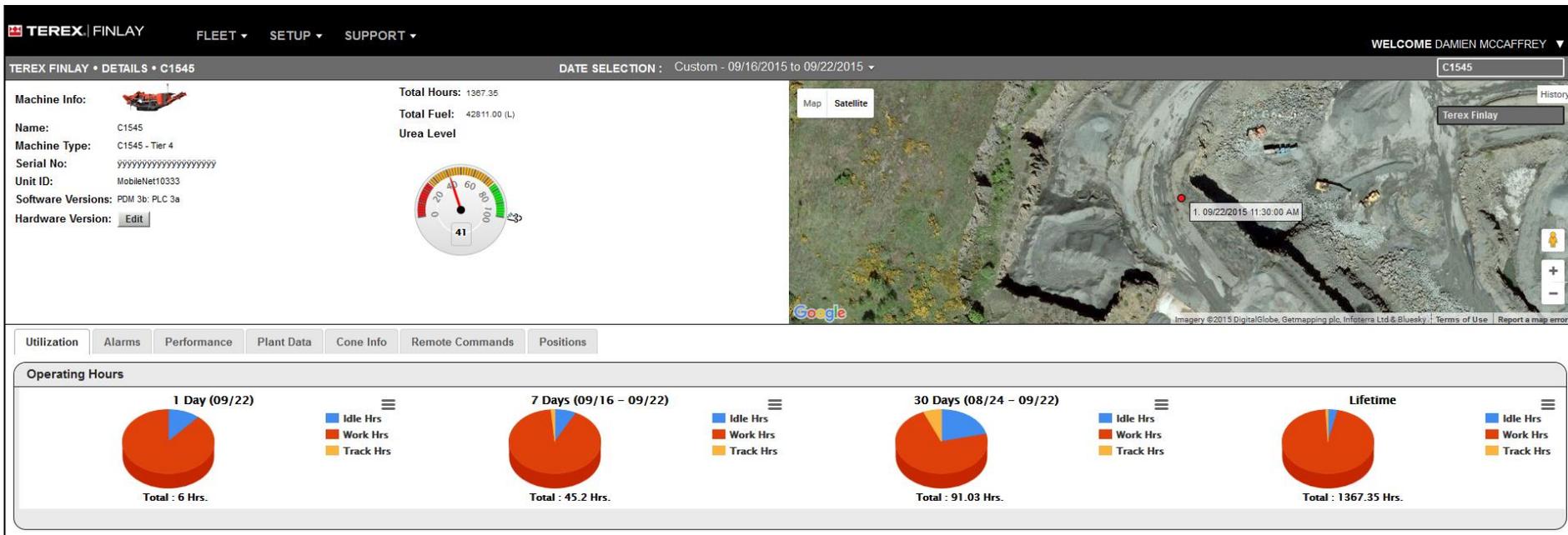
How does T-Link work?

T-Link enabled machines are fitted with a Modem and antenna. All machine information that is already captured on existing machines is transmitted via the Modem, through a satellite or GSM signal to a data server. System users can then access this machine information via a web based interface---called T-Link!



What information is captured?

- Fuel consumption
- Tonnage information (requires weigh scale)
- Machine Alarm codes
- Machine Location data
- Engine performance & running information
- Machine hours.
- Plant Utilisation information.
- Specific machine info unique to the particular model.



Where is it fitted?

The modem will normally be fitted behind the main electrical control panel on the crusher, hidden out of site.

The aerial will normally be fitted on top of the machine, near the “horns”.



Modem No

Are there different Modems?

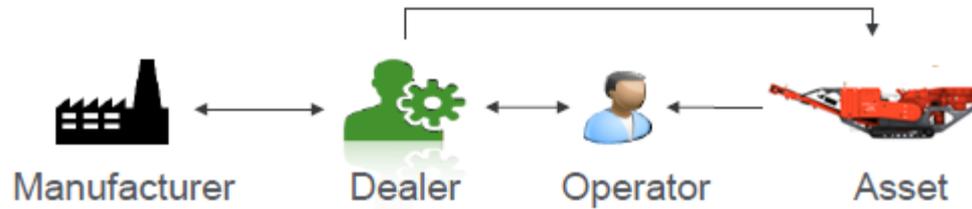
There are 2 different modems which may be fitted according to the region of the world the machine will be working in:

- ROW Modem
- USA & Canada Modem

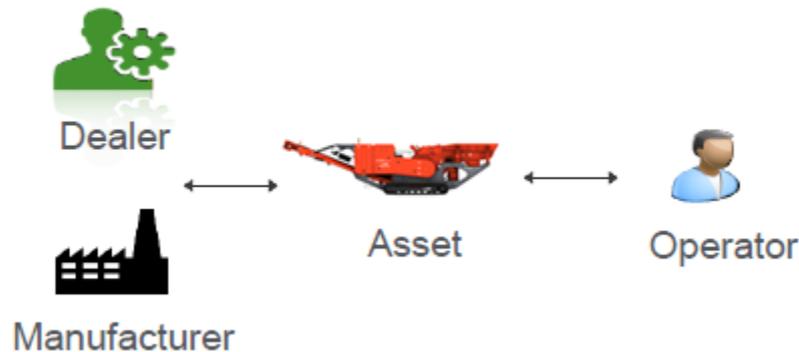


Modem No

Today's Support & Service Model



Tomorrow's Support & Service Model ??



- Ability to monitor machine usage allows dealer to analyse performance data and ensure optimum performance of machine is maintained.
- Access to machine usage data and working hours allows dealer to plan service and maintenance schedules.
- Having access to machine fault & alarm data allows much faster troubleshooting of issues, and faster breakdown resolution times.
- Machine location data allows dealer to coordinate service personnel and resources.
- Terex Finlay helpdesk also have remote view of dealer machines, allowing helpdesk personnel to assist dealer in breakdown resolution process when required.
- A pro-active approach to monitoring a customers fleet of machines gives the customer more confidence in the aftermarket support and improves customer relationship.
- Monitoring of machine Hire fleets.

Enhanced Machine Uptime

- Accurate engine hours monitoring
- Planning routine service
- Enhanced dealer support.

Improved fleet Control

- Fuel economy reporting. (Cost per tonne if Belt-weigh fitted)
- Idle time/ Working time monitoring.
- Engine load recording.
- Fleet management reporting
- Utilisation reporting.

Enhanced Security and Visibility

- Real time machine location.
- Geo-fencing of machine location.
- History of machine movements.

- Terex Finlay are providing T-Link free of charge to our dealer network on all crushers, with a data subscription of 3 years included.
- Terex Finlay encourage the dealer network to promote the benefits of using this free service, and use this as a tool to develop customer-dealer relationships.
- The 3 year subscription will begin automatically when the machine reaches 100 engine hours, or before that if activated sooner.
- Once the 3 year subscription has expired, the dealer has the option of renewing the subscription through the Terex Finlay spares department. For further information on dealer pricing for subscription renewals please contact Terex Finlay Spare parts department.

What machines are T-Link enabled?

Terex Finlay are fitting T-Link hardware to every crusher model in the range as standard.

The modem fitted to the machine will differ depending on the region it is going to. The modem is a “Plug-and-Play” component, and will be the last component fitted to the machine before dispatch to a dealer.

Screening plants will not be fitted with T-Link as standard from January 2016, however there are plans to introduce the system on screening plants later in 2016.

How is T-Link Structured?

T-Link has a “family-tree” structure. Terex Finlay have a company account. This is the factory level account where all Finlay machines are visible.

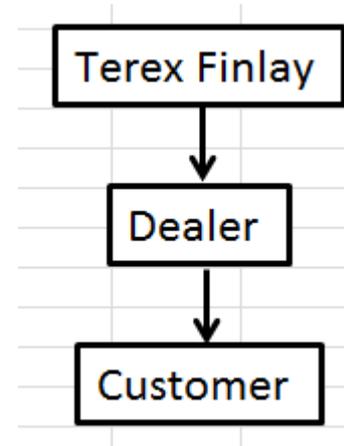
Terex Finlay will set up each dealer with a company account, which is a tier below the factory account. Only machines purchased by the dealer will be visible to the dealer.

Terex Finlay also have the ability, when requested, to set up a company account for the customer who is operating the machine. This will be a tier below the dealer account.

Once a machine is dispatched to a dealer, the machine will be assigned into the dealer account. The machine can then be assigned into a customer account if requested by the dealer.

Each company account can have multiple users. Again, all users will be administered by Terex Finlay when requested.

Note: Recommend limiting number of users for each company.



Terex Finlay are responsible for all of the administration of the T-link system. All company accounts and user accounts, both for the dealer and the customer will be administered by Terex Finlay.

Terex Finlay are responsible for assigning machines into dealer accounts, and also for assigning machines into customer accounts.

Terex Finlay will not be actively monitoring the machines on T-Link. Terex Finlay will have visibility of every crusher, and can view machine information if and when required for helpdesk purposes etc.

Terex Finlay will not be actively monitoring the T-Link system on a daily basis.

We encourage the dealer to pro-actively use T-Link, utilising all of the features of the system to provide a better service to the customer and improve dealer-customer relationships.

We recommend that a T-Link “champion” within your business is given responsibility for actively monitoring and using T-Link daily. This will ensure that both the customer and dealer will reap the full benefits of the system.

We strongly recommend that the dealer include the below statement (or equivalent) in your sales contract with the customer. (Machine Invoice).

This is the same wording contained within the Terex Finlay T&C's.

“If a telematics system is included with the Equipment, the telematics system is administered by a third party (“Teleservices Provider) and collects a range of operational data about the Equipment including, but not limited to, usage, performance and reliability. Buyer consents to Seller’s obtaining such data from the Teleservices Provider for warranty, product improvement and customer support purposes. Buyer understands that the Equipment warranty is conditioned on the proper operation of the telematics system and Buyer shall not disable, tamper or interfere with the telematics system”.

Is T-Link backwards compatible?

Terex Finlay will not be offering a telemetry hardware kit that can be fitted to older model crushers.

The reason for this is that older machines will not have the correct software fitted to communicate with the modem, and in some cases (where the machine model has been updated with subtle changes), the machine may be configured differently and not communicate properly.

The T-Link system will not allow the user to remotely disable a machine.

The T-Link system will allow the operator to view selected machine data captured from the plant, however it does not give the user the ability to remotely make any changes to the plant.

Eg. No ability to change CSS or other settings of crusher.

Is the Information displayed Live?

The T-Link system is not a real-time live display of plant data.

The modem will send information from the machine back to the server at least once per hour while the machine is working.

In most cases, the modem will send information from the machine more frequently, typically every 10-15 minutes.

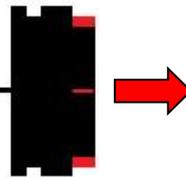
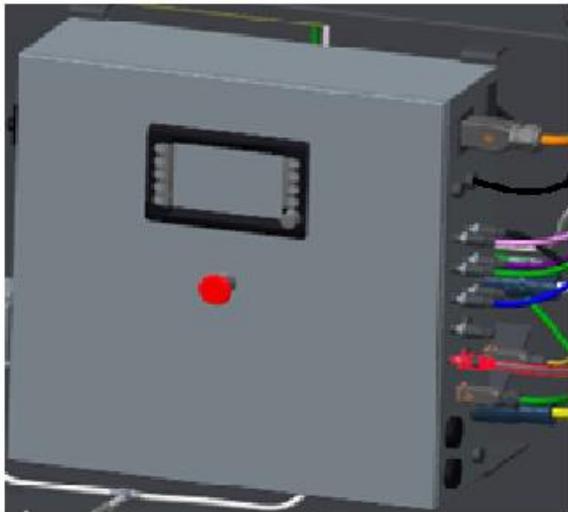
The user can request an update from the machine. This sends a ping to the machine requesting all information to be transferred through to the server.

Can the Telemetry be disabled?

The T-Link system can easily be disabled on the machine. If an operator was to simply plug out the modem or antenna on the machine, then the machine will continue to operate as normal, but the modem will not be able to transmit machine data back to the server.

The T-Link modem is plugged into a Power/Signal connector from the main control panel. The 3 antenna cables must also be connecting to the designated mating connection on the modem.

The Terex Finlay control panel communicates with the modem using the J1939 CANbus interface.



Modem Connection	Antenna Cable
CELL	GSM Label
GPS	Blue Tag
SAT	Thick Cable

From the 1st of January 2016, when you receive a new crusher from Terex Finlay it will be Telemetry enabled.

To access T-Link you will need to contact finlay.tlink@terex.com expressing your wish to access the system.

The administration team at the factory will set up the dealer with user accounts, including usernames and passwords allowing access to the system.

Each person must have their own log-in credentials.

If you have any further questions or queries about the system then please contact the email address above and a member of the Finlay T-Link team will get back to you.